



**Figure 2-figure supplement 2. Nose poke cessation is insufficient to drive activity of Onset and Ramping neurons.** We identified ITI periods during which a nose poke was followed by at least a 2 s cessation period. Mean nose poke rate during the 1 s interval of the poke (-1) and two, 1 s no-poke intervals (+1 and +2) are shown for **(A)** Onset units and **(B)** Ramping units (cessation period in gray). If phasic firing to danger by Onset neurons was driven by nose poke suppression, then *greater* activity should have been observed to nose poke suppression. By definition, nose poke cessation is complete (suppression ratio = 1.00), whereas mean suppression ratio to danger was high, but incomplete (0.83). **(C)** Onset neurons were nearly unresponsive to nose poke cessation. **(D)** Ramping neurons were only weakly responsive. Comparison of single-unit firing to danger (Onset, first interval; Ramping, last interval) and nose poke suppression (first interval) revealed no correlation and an overwhelming bias towards greater firing to danger for **(E)** Onset neurons ( $R^2 = 0.01$ ,  $p = 0.32$ ,  $p(\text{sign}) = 1.62 \times 10^{-6}$ ) and **(F)** Ramping neurons ( $R^2 = 0.08$ ,  $p = 0.10$ ,  $p(\text{sign}) = 1.22 \times 10^{-4}$ ). Firing of Onset and Ramping neurons was not the result of nose poke suppression, or nose poking itself.